

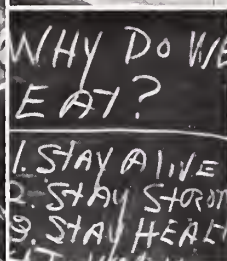
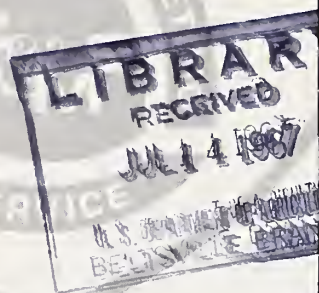
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AGRICULTURAL MARKETING



July 1967

Vol. 12, No. 7

USDA GRADES— to help you choose

C&MS Personnel Spotlight on F&V Market News Reporter

THE HEADLINE in the Parkersburg (W. Va.) *Sentinel* read, "Fruit and Vegetable Reporter Indispensable." The commercial wire service story went on to say that "Charles E. Rannells was sick one day and nobody knew the price of potatoes."

Rannells is a fruit and vegetable market news reporter for the U.S. Department of Agriculture's Consumer and Marketing Service. He provides information about produce prices, supply, and demand on the Pittsburgh market for farmers and dealers in an area that includes Pennsylvania, West Virginia, and Ohio. The wire service notified its customers that there would be no produce report that day because of his absence. One newspaper editor, when he got this notice, said Rannells is probably the world's only indispensable man.

The very nature of Rannells' beat demands physical fitness. Sickness is

so rare for him that when he is sick it makes news. He gets up five mornings a week at 4:30 a.m., is on duty from 6:00 to 9:30 a.m. at the produce yards. He covers an area of five or six blocks in the produce yards, figures he walks about three miles, considering the necessary backtracking.

Rannells' job is gathering price information from wholesale produce dealers and salesmen. Each day, he interviews 70 to 75 salesmen, visits 25 wholesale stores and about 20 firms at the railroad terminal. These facilities serve about three million people in the Pittsburgh metropolitan area.

After his early morning three-hour stint, Rannells goes back to his office, compiles a report using this information, together with information on available supplies of fresh fruits and vegetables arriving by rail and truck, collected by other personnel in his office. He then dictates

the report of market conditions as rapidly as his secretary can prepare the copy for transmission over the C&MS nationwide leased wire teletype network.

By 12:30 p.m. Rannells has his complete report sent to all points by teletype. It is then mimeographed and distributed by messengers to local dealers, railroads, banks, and any others who have requested them.

Rannells began his career as a potato inspector in Virginia. He also worked in Florida, Georgia, and South Carolina before becoming a market news reporter.

He likes his market news job because he gets to meet people. But there isn't too much time for chatting when you have to get the facts—fast!

Rannells' job—market intelligence—is one of the many C&MS functions that help make the movement of food from the farm to the corner grocery store an efficient happening.

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Consumer and Marketing Service

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COVER STORY

Because the USDA grade means the same thing in every store, it makes the choice between products and prices a meaningful process. See pages 4-6.

**USDA GRADES—
to help you choose**

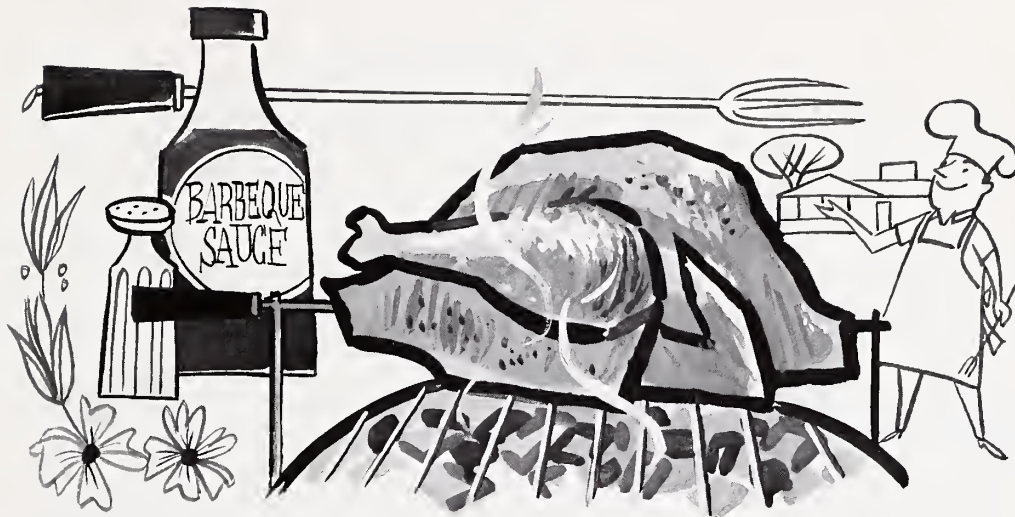
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SUMMER TIME is TURKEY TIME



TURKEYS HAVE COME a long way in the past few years, not only in production, but also in consumer popularity. For people everywhere are discovering that turkey is just as delicious in mid-summer, in fact year-round, as it is at a Thanksgiving or Christmas feast.

This year the U.S. Department of Agriculture says turkey producers plan to beat last year's record output of 115.5 million birds by 5 to 7%. And that should mean prices that are easy on the family food budget.

Turkey is a most versatile food in every season. Homemakers can feature it in both indoor and outdoor menus. Any size turkey, whether a 4-pounder or a 24-pounder, can be barbecued, braised, broiled, fried or roasted. And there are unlimited menu ideas for cold turkey too. A bonus factor is that today's turkeys generally come ready-to-cook and need no attention except removal from the bag.

So, since summertime brings picnics, patio or beach parties, a busy turn at the barbecue pit, gala get-

togethers for the family and friends, turkey is a good food to keep in mind. A turkey barbecue combines fun and flavor. It gives everyone a chance to get into the act. And the aroma of golden-crusted turkey revolving on a spit or sizzling on an open grill whets appetites already sharpened by the fresh air.

The USDA's Consumer and Marketing Service reminds consumers that half the secret to barbecuing a turkey is the fire. Starting the fire, keeping it going at the right temperature, and handling the bird (or its parts—drumsticks, thighs, breast roasts or wings) so the fire gives it just the right treatment are established answers to good barbecuing.

Charcoal briquets will give you a quick, constant heat. Dump them evenly over a half inch layer of wood shavings or paper and smooth out to one-layer thick with the back of a rake. And remember the size of the pit depends on the number of servings. Allow 3 square feet for every 28 portions.

Another answer to just-right barbecued turkey is a good barbecue

sauce. Here's a popular recipe suggestion:

One teaspoon salt, 1/2 teaspoon pepper, 1 tablespoon paprika, 2 tablespoons brown sugar, 1 teaspoon mustard, 1 cup chopped celery, 1 cup catsup or chili sauce. Add to these, 1 medium onion, finely chopped, 1/2 cup water, 2 tablespoons vinegar, 2 tablespoons butter and 2 tablespoons Worcestershire sauce.

Blend the salt, pepper, paprika, and sugar. Add the onion, or garlic if you prefer, catsup and water. Bring to a boil. Remove from heat and then add lemon juice, Worcestershire sauce and butter. This makes 2 1/2 cups.

For best results, make the barbecue sauce the evening before you serve it, and allow to stand refrigerated so that all flavors will blend perfectly. It takes around 2 1/2 to 3 1/4 hours to cook a 12-pound turkey, one of the most popular family sizes.

In "the good ole summertime" turkeys should be uppermost in housewives' menu-planning minds. For they'll solve any menu problem and satisfy the whole family.

USDA GRADES—to help you choose

By S. R. Smith, Administrator
Consumer and Marketing Service

THE RIGHT TO SAFETY—the right to be heard—the right to be informed—the right to choose.

These four basic consumer rights were proclaimed by President Johnson, and before him by President Kennedy.

U.S. Department of Agriculture grades for food help consumers to implement all four of those rights.

To be safe. The official USDA grade shield may be used only on foods that are clean and wholesome. In the case of meat and poultry, the product must first pass a rigid Government inspection for wholesomeness before it is eligible for grading. For other food products, the processor who wishes to have his product carry the grade shield must meet strict requirements for sanitation in his plant, equipment, and operating procedures.

To be Informed. The U.S. grades plainly marked on the package or the product, provide the food shopper with reliable, impartial information on quality. *Food is the only consumer product for which such service is provided by Federal and State governments.*

USDA's Consumer and Marketing Service, in cooperation with State departments of agriculture, offers grading services to processors and packers on a voluntary basis, but not at Government expense. They pay a fee for the service if they wish to use it—and many do. They paid nearly \$29 million for grading services in the year ending June 30.

To Choose. The right to choose is, of course, meaningless, unless the consumer is well-enough informed

to choose wisely. Thus the rights to be informed and to choose must go hand in hand—and the consumer who is informed on food quality by USDA grades will have the information he needs to choose intelligently. Because the USDA grade means the same thing in any store, in any part of the country, at any time of the year, it makes choice between products and between prices a meaningful process.

To be Heard. The consumer who buys by USDA grade makes his voice heard in the marketplace—and all the way back to the producer. Buying by grade does not mean buying only the best—it means a choice of qualities. Sometimes a lower grade is perfectly good for a particular purpose—U.S. Grade B eggs for casserole dishes, for example—and can mean a saving in money.

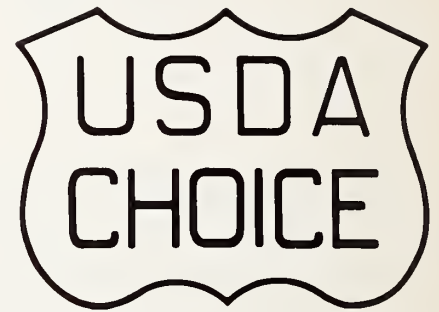
The “economic votes” cast by consumers through their purchases of USDA Choice grade beef have resulted in a large increase in the production of this quality of beef. Farmers got the message—and aimed their breeding and feeding programs toward producing Choice beef. About 75 percent of the beef graded now rates as Choice quality. However, many stores are now offering their customers two grades of beef—so that they can choose the quality best suited to their particular needs.

Foods most commonly carrying the USDA grade mark include beef, lamb, chicken, turkey, butter, and eggs. There are grades available for a great many other products but they are not so widely used.

Here, in brief summary, are the major kinds of foods graded, the grades used for those products, and what they mean. Look for them when you shop. They're there to help you choose.

MEAT

Kinds graded: beef, veal, calf, lamb, yearling mutton, and mutton.



Grade names: U.S. Prime, U.S. Choice, and U.S. Good for all, except that mutton is not eligible for the Prime grade. There are lower grades for each of these meats, also, which differ slightly in terminology but are not likely to be seen in retail stores. The next three lower grades for beef—U.S. Standard, U.S. Commercial, and U.S. Utility—may, on occasion, appear on retail counters.

What the grades mean: Beef—

U.S. Prime, the top grade, is produced from young and well-fed beef-type cattle. Meat of this grade is liberally marbled; roasts and steaks are consistently tender, juicy, and flavorful.

U.S. Choice beef is of high quality and usually has less fat than Prime beef. Roasts and steaks from the loin, rib, and top round in this grade are tender and juicy, and

Here are the major kinds of foods graded, the grades used for those products, and what they mean.

other cuts, such as those from the bottom round or chuck, which are more suitable for pot-roasting or braising, will be juicy with a well developed flavor.

U.S. Good grade beef is lean, but of fairly good quality. Although cuts of this grade lack the juiciness and flavor associated with a higher degree of fatness, their relative tenderness and high proportion of lean to fat please many thrifty shoppers.

U.S. Standard grade beef has very little fat and a mild flavor. It lacks juiciness but is relatively tender since it comes from young animals.

U.S. Commercial beef comes from older cattle and therefore lacks tenderness. Long slow cooking with moist heat is required for most cuts to develop the rich, full flavor of mature beef.

Veal and Calf—Veal is produced from animals that are 3 months or less in age; calf from animals between 3 months and 8 months old. The higher grades of veal, U.S. Prime and Choice, are more thickly fleshed than the lower grades, so have a higher proportion of meat to bone.

Also, they have more fat and therefore are more juicy and flavorful. No grade of veal, however, has enough fat intermingled with the lean to make cooking with dry heat practical. Moist heat is needed to insure juiciness and development of flavor. Calf is intermediate between veal and beef in its texture, flavor, and tenderness, and juiciness.

Lamb, Yearling Mutton, and Mutton—Meat produced from sheep is divided into three classes, according to its age when slaughtered—lamb, yearling mutton, and mutton.

Most of the sheep produced in this country are marketed as lamb.

Since lamb is produced from young animals, most of the cuts of the higher grades are sufficiently tender to be cooked by dry heat—roasting, broiling, and pan-broiling.

Yearling mutton, as the name implies, comes from animals between 1 and 2 years of age. It is produced in limited quantities, but is preferred by some people because it is more flavorful than lamb. Chops and legs of the higher grades are tender enough to be cooked by dry heat.

Mutton, which comes from mature animals, lacks natural tenderness and should be braised or pot-roasted.

POULTRY

Kinds graded: turkey, chicken, duck, goose, guinea, squab.



Grade names: U.S. Grade A, Grade B, U.S. Grade C.

What the grades mean: Poultry grades are based on the conformation, or fleshing of the bird—the proportion of meat to bone; the "finish" or amount of fat in and under the skin, which tends to keep the meat moist and tender while cooking; and the absence or degree of defects such as cuts, tears, and bruises.

The "class" of the bird, which will appear on the label, is a guide to tenderness and to the appropriate

cooking method. "Class" is indicated by the words "young," "mature," or "old" and by such terms as "broiler," "roaster," and "stewing hen."

EGGS

Kinds of grading: Eggs are graded for size and quality. There is no relation between size and quality.



Grade names: For quality—Fresh Fancy Quality or U.S. Grade AA, U.S. Grade A, and U.S. Grade B. For size—U.S. Jumbo, Extra Large, Large, Medium, Small, and Pee wee.

What the grades mean: The two higher quality grades have a large proportion of thick white, which stands up well around a firm, high yolk. Grade B eggs have a thinner white, which spreads over a wide area when broken; the yolk is rather flat and may break easily.

The term "Fresh Fancy Quality" is used only on eggs which have been produced under a special quality control program designed to insure freshness as well as high quality.

Official egg sizes are based on weight-per-dozen, not size of the individual egg, although variation of sizes of individual eggs within a dozen is limited by the standards.

Minimum weight of a dozen "Large" eggs is 24 ounces; "Medium," 21 ounces; "Small," 18 ounces, etc. There is a three-ounce difference between each of the weight classes.

DAIRY PRODUCTS

Kinds graded: Butter, Cheese, and Swiss cheese, nonfat dry milk. A quality control program and "Quality Approved" rating is available for process cheese, cottage cheese, sour cream, and buttermilk.



Grade names: U.S. Grade AA, U.S. Grade A, and U.S. Grade B for both butter and Cheddar cheese. They are the same for Swiss cheese, except there is no U.S. Grade AA (There is also a grade C for Cheddar and a C and D grade for Swiss cheese.) Grades for nonfat dry milk are U.S. Extra Grade and U.S. Standard Grade.

What the grades mean: The higher grades of butter have a pleasing and desirable sweet flavor and are made only from cream that has such flavor. Grade B butter is generally made from selected sour cream and therefore lacks the fine fresh flavor of the top grades.

The top grades of cheese indicate desirable and consistent flavor, body, and texture, as appropriate for the type of cheese. In Cheddar this includes sharp, mellow, and mild.

The U.S. grade shield on packages of nonfat dry milk is assurance of dependable quality and compliance with sanitary requirements. It is also assurance, in the case of

"instant" nonfat dry milk, that the milk powder will in fact dissolve instantly and completely.

FRESH FRUITS AND VEGETABLES

Kinds graded: Most fresh fruits and vegetables are packed and sold on the wholesale market on the basis of U.S. grades. There are standards for 72 different kinds. Also there are 13 "consumer standards" developed for use at the retail level.



Grade names: The typical range of grades used at wholesale for fresh fruits and vegetables includes U.S. Fancy, U.S. No. 1, U.S. No. 2. There are sometimes grades above, and below, that range. For instance, grades for apples are U.S. Extra Fancy, U.S. Fancy, U.S. No. 1, and U.S. Utility. The "consumer grades" are, generally, U.S. Grades A, B, and C.

What the grades mean: Grades for fresh fruits and vegetables are determined on the basis of the products' color, size, shape, degree of maturity, and freedom from defects. Defects may be those caused by dirt, freezing, disease, insects, or mechanical injury.

PROCESSED FRUITS AND VEGETABLES (and related products)

Kinds graded: Grades have been developed for a great variety of processed fruits and vegetables—canned, dried, and frozen—and a number of related products such as peanut butter, jams, jellies, pickles, olives, honey, and orange juice crystals.



Grade names: Usually, U.S. Grade A or U.S. Fancy; U.S. Grade B or U.S. Choice or U.S. Extra Standard; U.S. Grade C or U.S. Standard. There are very few exceptions to this pattern.

What the grades mean: U.S. Grade A (or Fancy) indicates an excellent quality in processed fruits or vegetables, uniformity in size and color, virtual freedom from defects, and the proper degree of maturity or tenderness. This grade is suited for special uses, as in desserts or salads, where appearance and texture are important.

U.S. Grade B is a good quality, just as nutritious as the top grade, but the product may not be as uniform in size and color, as tender or as free from blemishes. A large proportion of processed fruits and vegetables are of this grade and it is quite satisfactory for most uses.

U.S. Grade C indicates fairly good quality. The product is just as wholesome and may be as nutritious as the higher grades.

Consumers will not find all of these foods identified by grade in the grocery store, even though most of the trading in food, below the retail level, is done on the basis of USDA grades. In general, processors and packers will carry the USDA grade shield on their products only when they feel it will give them a merchandising advantage, or when consumers or retailers demand it.

However, many foods do carry the USDA grade mark. So it pays to learn to recognize the grade mark and know what it means. It can help you to know more about what you are buying, to compare prices of foods in different stores, and to get the most for your money. With this knowledge you can, in other words, truly use your right to choose.

on the way to market

Federal-State services help Alabama farmers.

By Otto A. Hansen

ON MARKET DAYS in season you can see 500-600 farmers lining up outside the Dothan, Ala., Farmers' Market to sell their fruits and vegetables.

They bring trucks—old trucks, new trucks, home-made trucks—or they pile their produce in the trunks of their cars. Most of them are small farmers, some just subsistence farmers, and some are only “kitchen gardeners”—but all benefit from this unique Federal-State farmers' market project.

A number of years ago, there was no market in Dothan. Only the larger farmers could afford to sell all their crop by shipping it to markets a hundred or more miles away.

Then the Alabama Department of Agriculture offered its help. Using matching funds provided by the Consumer and Marketing Service of the U.S. Department of Agriculture, Alabama State marketing specialists helped the farmers organize their own market in Dothan.

As a result, farmers selling through the market now get three kinds of assistance.

First, Federal-State grading services are provided at the market—so that farmers can guarantee quality to buyers—even those a thousand miles away. Federal-State inspectors examine each lot of fruits and vegetables arriving at the market and assign grades which are easily understood descriptions of quality.

Second, Federal-State market news is provided—to give local producers, as well as faraway buyers, an

idea of the market. Regular, daily market news reports tell the prices being paid, the qualities and quantities available, and the demand or movement of the produce through the market. In other words, this market news service lets a farmer know what his marketing prospects are on the Dothan market.

And third, a marketing specialist from the Alabama Department of Agriculture works with Dothan's farmers to help them meet the marketing requirements of a modern marketing system. He has taught them to grade their own produce before bringing it to market, to put up packs of uniform quality, and to use better and more uniform packaging. In this way, the produce of a number of small growers can be combined into the large lots of uniform quality and packaging needed by large-scale buyers—so that it will bring a higher price.

This market has been a success. Today, it brings in more than a half million dollars extra income each year to the Dothan economy. In addition, the 960 member farmers reap extra dividends from their investment in the market itself.

The market has grown. In 1961, its first year, about 250 farmers sold produce in Dothan. Today, 600 farmers might sell at the farmers' market in one day!

And farmers are getting better prices for their produce. Because of the quality control program—both grading and uniform packaging—buyers from around the country have been attracted to Dothan. Last

year, tomatoes on the Dothan market were shipped as far north as Philadelphia and as far west as Chicago. More buyers mean better prices to the small farmers of Dothan.

Although many fruits and vegetables are sold at the Dothan market, tomatoes are the biggest single crop. The seven-week tomato season now sees between 10,000 and 15,000 car-

The author is Officer-in-Charge, Federal-State Fruit and Vegetable Market News office at Birmingham, Alabama.

tons of tomatoes auctioned off on many days.

The Dothan Farmers' Market is one of five farmers' markets in Alabama—the others are in Birmingham, Mobile, Fort Payne, and Montgomery—which are helping farmers, particularly small farmers, by giving them the modern tools of marketing—grading, market news, cooperative selling, and quality control.

These programs are examples of the type of Federal, State, and local cooperation that can do so much to improve agricultural marketing.

As one farmer put it recently: “I used to spend more time trying to sell my produce than I did growing it—and I made less money—because I had to haul everything 100 miles away to a market in Columbus, Ga.

“I can grow more now, spend less time trying to sell it—since they opened up the Dothan Farmers' Market.”



POWER IN THE MARKETPLACE

Growers of fruits and vegetables once had it, but lost it. Today—through organized action — They're making strides toward regaining it.



He had a few marketing problems—plenty of “market power.”



Under marketing orders, producers cooperate to develop unified selling power that will put them on a more equal footing with large buyers they deal with. Basis for establishing or changing provisions of every order is the public hearing, where all interests can air their views. A program is voted in, amended, or voted out by producer referendum.

BACK WHEN A grower of fruits and vegetables hauled his produce to market in his own wagon, marketing really wasn't much of a problem.

Face-to-face with his customers, he was in a position to be an effective bargainer.

Today, the grower's markets are complex — often far away. Between him and the consumers are a whole line of people and services. Buyers — who often in turn sell to other buyers — are becoming fewer, larger, and are demanding products in large quantities, of specific grades and qualities, and in standardized packs.

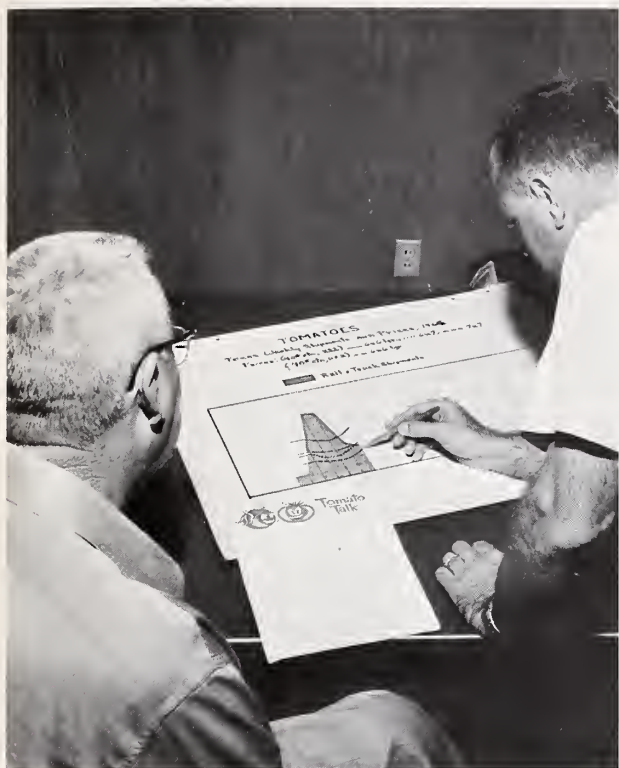
In this newer, competitive climate, growers are finding that the key to effective marketing and bargaining strength lies in organization.

An important form of organized marketing is the *Federal Marketing Order program*. Forty-seven such programs now cover the marketing of many fruits and vegetables, as well as a number of related specialty crops.

Included are all — or virtually all — the Nation's fresh citrus fruits, fresh pears, nectarines, olives, hops, walnuts, dates, peanuts, almonds, filberts, and a variety of other fruits, vegetables, and potatoes produced in scattered parts of the country.

Authorizing these programs is the *Agricultural Marketing Agreement Act*. This enabling law also sets certain guidelines for the operation of all Federal marketing orders, to assure that they will be in the public interest.

A marketing order is developed by a commodity industry, with help



Operating a marketing order isn't left to chance. Those administering it develop facts and figures that enable them to clearly visualize the farm-to-consumer marketing picture for their commodity. Such information is part of the economic chart of the course to be followed in the season ahead.

from the U.S. Department of Agriculture's Consumer and Marketing Service. Once in operation, the program is administered locally by a committee of growers and handlers selected from within the industry.

Marketing specialists with the C&MS Fruit and Vegetable Division make sure the program operates within the framework of the order.

An area's entire production of a crop is covered by an order, permitting producers to join together to enhance their market power and to build consumer confidence in their products.

While most Federal orders contain quality provisions, many also provide for adjusting the supply of a commodity to demand. A packer of Florida grapefruit, for instance, ships a specified quantity each week, based on the proportion of the total crop he handles and on the amount the market can take. Supply—stretched over a longer season—thus flows to market as needed and at more stable prices. Grapefruit not needed is "stored" on the tree in better condition than if it were allowed to stack up—and deteriorate—in handlers' plants or retail foodstores.

USDA inspector examines apricots grown in Washington State to see that they meet size and quality standards set under a Federal marketing order. By giving buyers good quality produce in standard containers and packs, growers are gaining satisfied customers and greater bargaining power in a market where modern merchandising figures so largely.



KEEP IT COOL, KEEP IT CLEAN

Tips for homemakers on protecting meat and poultry against spoilage—especially during the warm summer months.

by Karen Berke

SUMMERTIMES HERE signaling backyard barbecues, picnics, camping trips to mountains and beaches—in general, enjoyment of the great outdoors.

And where you find people outdoors, you'll usually find food—in endless variety that stimulates even the weakest appetite.

Warm weather stimulates not only humans, but microorganisms, too. And, spoilage-producing microorganisms can affect all perishable foods.

The wise homemaker knows she must protect her food as soon as she selects it from the grocery store shelf.

For meat and poultry products, consumers have a partner working for them to provide assurance that these products will be wholesome when they leave the processing plant.

That partner is the U.S. Department of Agriculture's Consumer and Marketing Service. Its inspectors examine all meat and poultry products destined for interstate shipment to insure their wholesomeness and truthful labeling.

But after these products leave the plant, it largely falls on the homemaker to insure that the food she puts before her family remains free from spoilage.

In some foods—such as aged meat, butter, cheese, and pickles—we encourage the growth of certain bacteria, yeasts, or molds because they add flavor. Many of these same organisms will in time bring about the spoilage or decay of these foods.

There is another kind of spoilage which may not be as familiar to most of us, but may result in food poisoning.

Remember "ptomaine poisonings?" That was the blanket name given all food poisonings several years ago. Actually ptomaines are compounds associated with the spoilage of protein foods, but are poisonous when eaten.

Most so-called ptomaine poisonings are one of two types of food poisoning:

(1) Food intoxications resulting from eating food in which certain bacteria have grown and produced toxins. Botulism or staphylococcus poisoning are two examples.

(2) Food infections caused by eating food in which certain bacteria have grown in large enough numbers to be infectious. In this case, the organism itself is the poisoning factor. Poisonings due to *Clostridium perfringens* and two members of the *Salmonella* family are examples.

Since both types of spoilage are caused by the growth of microorganisms, it is important to know how to retard or prevent their growth.

Proper care of meat and poultry products begins in the processing plant. In those plants which sell their products across State lines, C&MS inspectors are on the job at all times to insure that meat and poultry products are wholesome . . . processing methods and equipment are sanitary . . . unwholesome products are destroyed . . . and products are safe to eat when they leave the plant.

Wholesalers and retailers do everything possible to insure that these standards are maintained up to the time you select your meats and poultry at the retail counter. From there on, it's up to you to

provide the protection.

Bacteria are energetic little fellows which may cause off-flavors and spoilage when spread to meat and poultry by careless store personnel, unsanitary cutting or storage equipment, grocery carts, or even balmy summer breezes.

So, select fresh meat and poultry—and processed products like sausage, bacon, and luncheon meat—only from clean, refrigerated display cases. Reject products when the package, plastic wrap, or vacuum seal is broken or punctured.

Return any products to the store which you feel are suspicious—most stores will replace the item willingly.

And don't buy any dented cans, or jars of food showing signs of gas or pressure such as bubbles or bulged lids, or abnormal odor or color . . . even if they are on sale. It's also a good idea not to accept gifts of home canned foods unless you are sure they were processed under established guidelines, such as the USDA's.

In selecting frozen meat or poultry products, make sure they are solidly frozen.

At the check-out counter, ask the clerk to pack meat and poultry and other refrigerated or frozen items together. This will help maintain their cool temperature until you get home. Protect these perishable foods from warm temperatures at all times—don't dally on your way home.

At home, store meat and poultry promptly in the coldest part of your refrigerator. Loosen the wrappings of fresh meat and poultry to allow some circulation of air. Store cured and smoked products in their orig-

inal wrappings—follow any storage directions on the label.

Store canned items in a cool place, too . . . *not* in the cabinet above your stove, where they will absorb heat.

That old saying "life begins at 40" is also true for microorganisms. Most microorganisms are retarded by freezing temperatures, but they become active around 40 degrees. Unfortunately, room temperatures (65-90 degrees) are those at which they grow and reproduce best. This is why it's important keep these products refrigerated.

Remember too, that your refrigerator gets a lot more use during warm weather. It must work harder to maintain its 35-50 degree temperature when the door is continually being opened. So, to help it do its job more efficiently in hot weather, and the rest of the year too, plan your meals and snacks so you get several items out at one time.

Now what happens to these microorganisms when food is cooked? Once the temperature gets above 120 degrees F. yeasts and molds are killed, while the activity of bacteria only begins to slow down. If the internal temperature of meat and poultry reaches 160 degrees, most food poisoning bacteria are destroyed.

However, as food cools down after cooking, it can become recontaminated by you, the equipment, or air. And when the temperature cools down to room temperature, these bacteria will become very active unless the food is refrigerated immediately.

So, either *Keep foods hot* (above 120 degrees), or *Keep foods cold* (below 50 degrees).

All leftovers should be cooled quickly and refrigerated. *Never* let a roast, turkey and stuffing, casserole, stew, soup, meat sauce, chili, or baked beans cool at room temperature to spare your refrigerator.

Cool hot foods about 15 minutes before putting them in the refrigerator. It's much better to cool and refrigerate a large quantity of hot food in several smaller containers rather than one large one.

Now, where do the food poisoning bacteria come from? The major

source is the uninformed or careless food handler.

If you have a cold or other infection, open cuts, sores, or boils you can contaminate both the food and the equipment you are using.

These bacteria are also carried by flies, cats, dogs, and rodents . . . or unclean utensils.

In a few instances, the food itself may be contaminated before it reaches you as a result of uninspected and unhealthy animals or food handlers, underprocessing, contaminated equipment, or lack of proper storage. This is why it is so important to buy meat and poultry products which you *know* have been adequately inspected.

In most cases, how the homemaker stores, prepares, and serves the food will determine whether or not her family gets food poisoning.

What foods are most affected by food poisoning bacteria? Any foods which have been handled a lot, such as salads, sandwich fillings, casseroles, and leftovers. Or, foods which have not reached the boiling point during cooking like meats, poultry, stuffings, and custards.

Add to this list foods which may have become recontaminated during cooling like custard and cream-filled

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cakes and pastries, or soup, stew, chili, etc.

Leftovers, cream sauces and other foods which are not reheated to the boiling point are potentials, too. The wise homemaker is particularly cautious when handling any of these foods.

Some advice for picnic lovers—*use* a good cooler or insulated food carrier. It is the best security measure you can have for a healthful summer.

Use the cooler for cooked meat and poultry items such as fried chicken, cooked sausages, or luncheon meats. These are good picnic products because they are less susceptible to rapid spoilage than uncooked foods.

Raw meats can be taken if they are carefully wrapped and chilled. In fact, it's a good idea to freeze

them first . . . then they'll help keep the temperature of the cooler low.

Leave the actual preparation of sandwiches, sandwich fillings, and salads until you are ready to eat. Refrigerate the ingredients, especially for salads, and mix just before you eat. This is particularly important in any food where salad dressings or mayonnaise are used, since these foods are most susceptible to food poisoning bacteria.

If a pre-mixed salad must be taken—like potato salad or cole slaw—store and carry it in small containers rather than a large one, and *keep it refrigerated in your cooler*.

All items that need refrigeration for the picnic should be well-chilled in your refrigerator before packing in a cooler.

Never carry hot foods, such as fried chicken, baked beans, macaroni and cheese, or casseroles, unless they are packed in an insulated container—or are thoroughly chilled first, refrigerated, and then reheated at the picnic.

Refrigerate all leftovers if you want to use them at home . . . otherwise discard them.

If you don't want to carry a cooler, plan your picnic meal around "fool-proof foods" such as bread, cheese, hard cooked eggs, fresh fruit, etc. For the meat item, choose any canned meat or poultry product that you can carry in the can, such as corned beef, chili, ham, or some of the dry or semi-dry sausages like salami, summer sausage, thuringer, and lebanon bologna.

Remember, you are the most important person in preventing harmful bacteria from contaminating your family's food.

Remember, too, that meat and poultry inspectors of USDA's Consumer and Marketing Service are your "behind-the-scenes" partners in the protective chain. You can buy meat and poultry products stamped with the official USDA inspection mark with assurance that the product came from healthy animals and birds, was processed under sanitary conditions, and is honestly labeled and packaged.

Then, it's up to you to "Keep it Cool" and "Keep it Clean."

CONSUMER AND MARKETING BRIEFS

Selected short items on C&MS activities in consumer protection, marketing services, market regulation, and consumer food programs.

ABOUT 60,000 CHILDREN ATE BREAKFAST AT SCHOOL

Near the end of the 1966-1967 school year (figures given are as of June 12), in 50 States and Territories, there were 719 breakfast programs in schools with 355,181 children attending. Average daily participation: 95,639, with 61,936 (about 65 percent) served free or at an especially low price.

EMPLOYEE SUGGESTION MEANS SAVINGS FOR COTTON DIVISION

Cotton warehousemen now have one less report to fill out each August 1.

This is the result of an employee suggestion. The suggestion outlined a means for the Cotton Division of the U.S. Department of Agriculture's Consumer and Marketing Service to use a report filled out for the U.S. Census Bureau by cotton warehousemen. It eliminates the necessity for warehousemen to report storage figures separately to the Cotton Division. An agreement was made between USDA and the Census Bureau which enables C&MS to have access to the Census report.

The agreement was adopted as part of the Federal Government's continuing effort to reduce the number of reports required of the public.

In the past, the Cotton Division has surveyed some 1200 warehouses annually for figures on the number of bales in storage. This data was used in preparing an estimate on the quality of cotton in the carry-over on August 1. By using a Census Bureau report, the Cotton Division eliminates this annual survey, the posting of the resulting figures, and other calculations by field offices.

ONE BILLION POUNDS GOES A LONG WAY

If every man, woman, and child in the United States (about 200 million people) were to sit down and eat one pound of meat a day for seven consecutive days, they would be eating just about as much meat as was quality graded during a recent four-week period by the Livestock Division of USDA's Consumer and Marketing Service.

The Division reports that it graded more than one *billion* pounds of meat on a voluntary, fee-for-service

basis, a new record, and up about 13 percent from the comparable period last year. The increase *alone* between this year's and last year's volume of meat graded for this comparable 4-week period would provide more than one-half pound of meat for almost every single person in this country.

PLENTIFUL FOODS FOR JULY

Plentiful turkeys have won the feature spot on the Consumer and Marketing Service's list of plentiful foods for July shoppers. This ties in with the industry's Summer Turkey Time promotion.

Other July plentifuls are cool fresh and processed lemons and limes, seasonal summer vegetables, fresh and frozen fish fillets and steaks, and dry beans.

July marketings of turkeys are expected to be nearly 16% greater than a year ago, and consumer prices should favor the family food budget. Latest figures on the lemon crop are 18.2 million boxes—16% more than were produced the previous season. And so far, one million more boxes of lemons have been processed than a year ago. Florida's lime crop is estimated to be the

second biggest of record—530,000 boxes, which is 26% greater than a year earlier.

Many summertime vegetables will be in good supply, too, with home and market gardens in the vicinity of larger centers of population adding to the vegetable bins.

The current inventory of fresh and frozen fish fillets and fish steaks is unusually large, and heavy production is expected over the next several months. Cold storage holdings recently amounted to over 189 million pounds, nearly a fourth above a year ago.

Dry beans round out the plentiful foods list for July.

DID YOU KNOW . . . ?

Washington, D.C. has more population than any of these 11 States: New Hampshire, Vermont, North Dakota, South Dakota, Delaware, Montana, Idaho, Wyoming, Nevada, Alaska, or Hawaii.

FOOD STAMP NEWS

Many residents of isolated San Luis Valley, Costilla and Conejos Counties, Colorado, speak no English—communicate in Castillian Spanish only. C&MS is translating Food Stamp literature into Spanish and contacting residents through parish priests.

FOOD FOR A JAMBOREE

Some 12,000 Boy Scouts are expected to attend an International Jamboree in Coeur d'Alene, Idaho,

July 29-August 10. At Jamboree chow times, they will consume more than 7 tons of USDA-donated foods, including 2,400 cans of chopped meat. In addition to the meat, the foods are rice, shortening, raisins, margarine or butter, peanut butter, and processed cheese.

USDA-donated foods are widely used in non-profit summer camps across the nation, to help provide added variety and substance to meals served to children.

The commodities for the Jamboree are to be supplied through Idaho's Department of Public Welfare, the agency which distributes donated foods regularly to Idaho's needy families, school lunch programs, and charitable institutions. USDA's Consumer and Marketing Service will replace the amounts used for this special event, so the day-to-day food-aid programs can continue for Idaho residents.

MORE STRAWBERRIES FLY TO MARKET

A total of 578 carlot equivalents of strawberries shipped from California by air as of May 11 is 65 percent more than for the same period last year. A record 93 carlot equivalents was air-shipped to Europe since May 9.

HOW MUCH POULTRY IN POULTRY SOUP?

Beginning September 1, all soups labeled as "chicken" or "turkey" must contain at least 2 percent poultry meat on a ready-to-serve basis. The USDA ruling winds up a 3-year effort by USDA's Consumer and Marketing Service to implement a labeling regulation under the Poultry Products Inspection Act.

FOOD TIPS

-from USDA's Consumer
and Marketing Service

The *tomato* is a misunderstood vegetable which often suffers from improper storage and care. When a tomato is picked in a mature pink-colored stage, it must not be chilled until fully ripened. Chilling interrupts the ripening process and the tomato may never ripen properly. Choose tomatoes that are well-formed, firm, plump, free from bruises and showing some pink or red color.

When you're looking for something different from beef and chicken for outdoor cookery, think of *lamb*. Because of its natural tenderness, lamb is ideal for outdoor grilling and roisserie cooking. Rolled leg or shoulder roasts, loin, rib, or shoulder chops, riblets, shanks, kebabs and lamburgers are great for outdoor dinners.

The USDA grade mark on lamb will tell you the quality. USDA Choice is the most available grade, and means the lamb will be juicy and flavorful.

It's *blueberry* time again, so plan to use lots of them in cereals, pancakes, muffins and desserts. Buy blueberries that look fresh, are firm and dry, and have a good blue color. The freshest berries usually have a silvery bloom, a natural waxy protective coating.



C&MS SEED MEN TAKE TO THE FIELD

C&MS' Grain Division tests seed variety for seed companies on a voluntary basis to be sure no one else has marketed it under another name.

By Bernard Leese

DEVELOPING A NEW PLANT variety for crop production can be a time-consuming and costly undertaking. Naturally the seed company that puts all this into such a research project wants to be certain they do have a new and distinct variety before they put it on the market.

They have to be sure because the Federal Seed Act requires that all

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vegetable seed in interstate commerce be labeled to indicate the correct variety name, and, although agricultural seed is not required to be labeled as to variety, any variety name used must be correct.

Variety name is really sort of a code—indicating the characteristics associated with a certain plant—and it's the way a buyer orders these characteristics. Each subdivision of a plant kind, which has its own unique characteristics, must also have its own unique variety name and the Federal Seed Act prohibits the marketing of a variety by any other variety name.

That's why many seed companies, when they think they have developed a brand new plant variety and would like to market it, take advantage of a voluntary testing program operated by the Grain Division of the U.S. Department of Agriculture's Consumer and Marketing Service to find out if anyone else has marketed it under another name.

Seed breeders using this free service furnish C&MS seed technologists with seed samples of their new variety along with all the information they can, including the history and

pedigree of hybrids and all noted characteristics. Then C&MS seed people go to work comparing it with all known varieties.

Most C&MS seed testing under this program currently is done on sorghum and cowpea varieties, although these technologists have done similar work with beans, onions, cabbage and soybeans.

Analysts checking a sorghum variety, for example, first try to verify the variety in the laboratory. They compare it with a known "check" variety, using *Martin* for open pollinates, *Atlas* for forage sorghums, and *RS 610* for grain and hybrid sorghum.

They look for indication of percentage in the color and size of the seed and color and hairiness of the glume (sheathing over the seed).

After about ten days under a bright light in the germinator, the sorghum seed forms seedlings they can examine. Stem color is then apparent; growth rate can be judged; vigor, primary leaf and root can be compared to known varieties.

If the variety can't be determined at this point, the C&MS seed men take to the fields. They plant the seed out in the field to see how it performs under actual growing conditions. There they grow plants to a certain height and begin a detailed identification.

At half-bloom they can determine probable bloom date and whether the variety is early, medium, or late maturing. They count the leaves (a plant may have from 9 to 18) originating from nodes above the ground, to judge maturity.

Because a node is produced about every 3 days in the growth of sorghum, they can estimate how long this variety will take to flower and compare flowering time to the check

varieties. Usually 36 days is considered early; 50 days, about normal and 70-75 days, late.

The seed men measure width and length of the leaves on the plant, and the carriage of the leaves. Some varieties have very strict carriage—upright leaves—making the plant look narrow.

The length of the seed head—from the top leaf, the flag leaf, to the top of the fruiting part of the sorghum—varies with variety, so they measure that. This distance, called exertion, becomes important when the grain is combined in the field. Poor exertion results in a lot of leaves getting in the equipment and makes threshing and cleaning more difficult. With good exertion, the combine cuts only the seed head.

They compare the stem size, which may mean the difference between a robust or a spindly plant, and the juiciness and sweetness of the stem.

And they check for tillering—the ability of the plant to put out new sprouts after a drought which demonstrates the variety's resistance to drought. Sorghum is often used in drier areas where corn would not be practical.

C&MS seed technologists compile all characteristics that might help distinguish the variety they're working with from known varieties, and when satisfied that they do have a new and different variety, or when sure it matches a previously developed variety, they so inform the seed company.

Additional information about this voluntary service may be obtained from Seed Branch, Grain Division, Consumer and Marketing Service, U.S. Department of Agriculture, Washington, D.C. 20250.



For children—blocks and boards for play.

IF PEOPLE ARE WELL fed they are more ready to accept constructive, new ideas to help better their lot," says Mrs. Leolia Spaugh, Farmers Home Administrator home supervisor helping low-income families in Wake County, North Carolina. Because of her lifelong belief in the importance of good nutrition, Mrs. Spaugh supports the county's school lunch and family food donation programs.

With a smile and roll-up-her sleeves attitude, the soft-spoken Mrs. Spaugh teaches low-income FHA loan recipients nutrition and budgeting so that they can make the most of their food dollars.

She urges them to ask welfare personnel about getting donated foods, and to talk with the school principal about lunches for the children.

Proteins, vitamins, and ascorbic acid are words Mrs. Spaugh uses often. "Low-income families hear these words on television and see them on packages in grocery stores," Mrs. Spaugh points out. "They catch on quickly and want to be educated. Then they will be less susceptible to false advertising." Mrs. Spaugh emphasizes that social workers should be nutrition-educated, so they can teach their clients, and help them make best use of the school lunch and family food assistance programs.

FHA Home Supervisor Teaches Nutrition

Mrs. Spaugh's portable classroom is a set of building blocks. It is a visual presentation of nutrition facts—the building blocks of a balanced diet.

Each block has four sides and is made from two cardboard filefolders, taped together. As each block turns, it tells: (1) the name of a nutrient, (2) what it does for the body, (3) foods rich in this nutrient, and (4) the disease or condition which may result from lack of this nutrient.

Working with seven or eight mothers at a time, Mrs. Spaugh also encourages them to plant gardens and to use throughout the year what the gardens yield. A garden in the yard of a Wake County, N.C. family can mean year-round plenty for them. Mrs. Spaugh tries to motivate people according to their own values and needs.

Mrs. Spaugh values listening as a

teaching tool. So, before she talks about foods or nutrition, she uses a nutrition questionnaire to find out who prepares the meals in a family, whether they use a stove (wood, gas, or electric), oven, refrigerator, pressure canner, or home freezer.

Asked for beginner's advice Mrs. Spaugh said, "Be patient, find out what your people want to learn and list it on a blackboard in front of them; get them involved, and keep them pepped up. Smiling, she concluded: "Wear boots in rural areas and don't get depressed if you get your feet muddy."

The Farmers Home Administration, an agency of the U.S. Department of Agriculture, offers a broad program of supervised credit to improve the incomes of family farmers, strengthening rural communities and reducing rural poverty.

For the family—building blocks of good nutrition.



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RETAILERS ATTEND COST-REDUCTION CLINIC

AS EVERY CONSUMER knows, there is a great need to keep the costs of food marketing as low as possible, because they make up by far the largest part of food prices.

The U.S. Department of Agriculture's Consumer and Marketing Service, through its Matching Fund Program, encourages the States to work on projects which will help accomplish just that.

A good example of such a project is one now being carried on by the New York State Department of Agriculture and Marketing. This project is aimed at getting to the people who need it the results of much of the research that has been concentrated on retail store efficiency. Using matching funds, provided in part by C&MS, the New York Division of Marketing is conducting clinics on food store operations research for retail store executives, managers and owners.

The clinics prepare these people to conduct an effective program of cost reduction within their own units, using the latest techniques.

The program for the clinics was developed and a team to conduct them was trained by transportation and facilities engineers with USDA's Agricultural Research Service and marketing specialists of C&MS and the State. The idea was to develop an independent team to conduct future classes throughout the State. The New York team could also set up clinics for those food and agricultural industries between the farm and the retailer. This would include grading stations, processing plants, packaging lines and distributors servicing the fast growing institutional market.

The New York project is cited by

C&MS Matching Fund Program Director George Goldsborough as a good example of what other States might do with their matching fund personnel to help industry groups in applying improved marketing methods.

The first three-day workshop conducted by the New York team was attended by 24 people representing 600 retail units. It dealt with the problems of work methods, materials, equipment, area layout, operating practices, inventory control, merchandising and management techniques, work simplification, and training procedures.

Each participant was asked to bring a detailed scaled layout of a store or department showing the equipment now in use, display layout, work and storage areas, passageways and doors. These layouts together with operations data such as sales per man hour and produce movement, served as a basis for a class discussion.

Leslie W. Driggs, chief marketing

representative of the New York Division of Markets, and matching fund coordinator for the State, was a prime mover in the workshop project. "Our division always has a backlog of requests inviting us to visit individual facilities," he says, "and the plea generally is for assistance in making the plant more efficient. After much review, we feel that basic principles of work simplification and motion economy must be taught before more difficult systems can be undertaken by the industry."

Driggs says that once the industry recognizes the potential savings and cost reduction in practicing basics of efficiency in operations such as workers' movements and produce handling, managers will insist their personnel develop the necessary skills and will include efficiency experts on their staffs.

He believes a workshop to train the decision makers in the basics of efficiency is a good way to approach the subject.

Those at the clinic apply known principles and proven research to solve common agriculture-industry problems.

